



**INTEGRATION OF MOTIVATIONAL INTERVIEWING, MINDFULNESS,
& CENTERING PRAYER IN THE TREATMENT OF A SUBSTANCE USE
DISORDER**

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Integration of Motivational Interviewing, Mindfulness & Centering Prayer

In the Treatment of a Substance Use Disorder

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Abstract

This paper will describe the unique components of three treatment techniques: Motivational Interviewing (MI) (Miller and Rollnick, 1991), Mindfulness (Kabat-Zinn, 1997) and Centering Prayer (Meninger, Keating and Pennington, 1970's) and how these treatment techniques assist in the management of neurobiological, emotional and cognitive cravings for people diagnosed with a Substance Use Disorder. A clinical definition of Substance Use Disorder will create the context for understanding the neurological, affective, and cognitive cravings experienced by those who use mood-altering substances. The parallels between the three interventions will then be recognized while integrative points of appropriate and effective use will be explained to enhance the clinical treatment for populations who are diagnosed with a Substance Use Disorder.

Keywords: Motivational Interviewing, Mindfulness, Centering Prayer

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In the Treatment of a Substance Use Disorder

According to the Diagnostic Statistical Manual of Mental Disorders V (2013), a Substance Use Disorder is diagnosed using overarching criteria which includes:

1. A substance is taken in larger amounts over a longer period than was intended.
2. A persistent desire or unsuccessful efforts to cut down or control the substance.
3. A great deal of time is spent in activities necessary to obtain the substance or recover from its effects.
4. Craving or strong desire to use the substance.
5. Recurrent use of a substance results in a failure to fulfill major role obligations.
6. Continued use of the substance despite knowledge of having persistent or recurrent social or interpersonal problems that are likely to have been caused or exacerbated by the substance.
7. Important social, occupational, or recreational activities are given up or reduced.
8. Use of the substance is recurrent in situations in which it is physically hazardous.
9. Continued use of the substance despite knowledge of having persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.
10. Tolerance has developed as defined by either a need for markedly increased amounts of the substance to achieve intoxication or desired effect or markedly diminished effect with continued use of the same amount of the substance.

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11. Withdrawal is experienced as manifested by either a characteristic withdrawal syndrome for the substance or the same (or closely related substance) is taken to relieve or avoid withdrawal symptoms. (Maisto, Galizio, Connors, 2015, p.16).

Components of Craving

A craving can be defined as an intense desire for some particular thing. Those individuals who have been addicted to alcohol or drugs will experience cravings as a symptom of their condition. It is this intense desire to keep drinking or using that keeps them a prisoner. Even when people become sober they can still occasionally have to deal with cravings. Substances provide a reward for the user that impacts the neurobiological, affective, and cognitive responses due to the change in brain functioning (Cravings In Recovery, n.d.).

Neurobiological Craving

The brain registers pleasure in the release of the neurotransmitter dopamine in the nucleus accumbens, a cluster of nerve cells lying underneath the cerebral cortex, so consistently that neuroscientists refer to the region as the brain's pleasure center (Understanding Addiction, n.d.). Mood-altering substances produce a flooding of dopamine into the nucleus accumbens. The hippocampus lays down memories of this rapid sense of satisfaction, and the amygdala creates a conditioned response to certain stimuli (Understanding Addiction, n.d.).

Dopamine not only contributes to the experience of pleasure, but also plays a role in learning and memory—two key elements in the transition from liking something to becoming addicted to it. Dopamine interacts with another neurotransmitter, glutamate, to take over the brain's system of reward-related learning. This system has an important role in sustaining life because it links

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activities needed for human survival (such as eating and sex) with pleasure and reward.

(Understanding Addiction, n.d.)

The reward circuit in the brain includes areas involved with motivation and memory as well as with pleasure. Addictive substances and behaviors stimulate the same circuit—and then overload it. Repeated exposure to an addictive substance or behavior causes nerve cells in the nucleus accumbens and the prefrontal cortex (the area of the brain involved in planning and executing tasks) to communicate in a way that couples liking something with wanting it, in turn, driving us to go after it. That is, this process motivates us to take action to seek out the source of pleasure (Understanding Addiction, n.d.).

Affective Craving

Researchers at Yale University School of Medicine in New Haven, Connecticut found that the region of the **brain** associated with regulating emotions, the prefrontal cortex, also appeared to show increased activity when decisions about cravings were taking place (Woznicki, 2010). A two-stage process of cue reactivity is proposed by Hayashi et al., in which the medial orbitofrontal cortex (mOFC) tracks the subjective value of the drug, indexed by craving self-reports, and the dorsolateral prefrontal cortex (DLPFC) incorporates intertemporal.

Availability and cue information to modulate the presumed mOFC value signal (Olivier and Koob, 2013). The hippocampus being important in memory of previous euphoric or dysphoric experiences can prompt external/environmental cues to trigger a craving (Definition of Addiction, 2011). Therefore, the emotional memories of either an external event or using a substance can motivate an individual to select the behavior of using a substance (Definition of Addiction, 2011).

Cognitive Craving

Cognitive processes also play a role in craving. Modern cognitive science generally describes the operation of mental functions in terms of information-processing systems—hypothesized mechanisms that control the acquisition and manipulation of information and translate that information into action (Tiffany, 1999). The cognitive processing model of craving proposes that over a long history of substance use, many of the actions involved in acquiring and consuming substances become automatized, meaning those activities controlled by cognitive processes operate quickly and effortlessly and require little focused attention (Tiffany, 1999). Users of substances mindlessly consume when using an automatized cognitive response.

Management of Craving

There are three clinical techniques to assist in the effective management of neurobiological, affective and cognitive cravings: Motivational Interviewing (Miller and Rollnick, 2002), Mindfulness (Kabat-Zahn, 2008), and Centering Prayer (Keating, 2003). These clinical techniques will be described below.

Motivational Interviewing

Motivational Interviewing (MI) is a person-centered approach to increasing an individual's internal drive for changing behavior by exploring and resolving ambivalence (Using Motivational Interviewing, 2008). The clinician “starts where the client is” by identifying the client Stage of Change and proceeding to motivate the client to the next stage. Ms. Simmen-Gray of IRETA summarizes, “In the MI process, understanding the stages of change reminds us that change is a cycle, an ongoing process...(Using Motivational Interviewing, 2008). The client may present with symptoms of a previous stage or same stage since the last appointment requiring the clinician to use a strength-based approach to encourage progression through the

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cycle of change. These Stages of Change are as follows: 1. Pre-contemplation; 2. Contemplation; 3. Preparation; 4. Action; and 5. Maintenance (Using Motivational Interviewing, 2008). The clinician can use this change process to engage people in treatment, help them decide to change, and support them through the process by expressing empathy; developing discrepancy; rolling with resistance; and supporting self-efficacy (Using Motivational Interviewing, 2008).

SAMHSA published two studies conducted by Landry, 1996 and by Miller, et. al. in 1995 which found motivation-enhancing techniques to be associated with reductions in alcohol consumption and increased abstinence rates. Another study conducted in 2001 by Dunn, et. al found that motivational techniques reduced alcohol frequency and amount with college students.

Mindfulness

Mindfulness meditation, a spiritual practice originally derived from Buddhist *Vipassana* meditation, is the cornerstone of the Mindfulness-Based Stress Reduction (MBSR) program developed by Kabat-Zinn in 1979 to teach patients with chronic physical and mental health problems how to improve their lives. MBSR is now used as an adjunctive treatment for a wide range of disorders and is increasingly finding its way into the treatment of addiction. Kabat-Zinn defines mindfulness as “paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally.” Mindfulness encourages awareness and acceptance of thoughts, feelings, behavior and bodily sensations as they arise, and recognition of their impermanence.

Mindfulness practitioners are taught to *acknowledge and accept* their experiences rather than to modify or suppress them by using a “present moment”. (Marcus and Zgierska, 2009).

Two studies showed that mindfulness meditation limits experiential avoidance by promoting nonjudgmental acceptance of moment-to-moment thoughts (Simpson TL, et al.

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2007) and by interrupting the tendency to respond using maladaptive behaviors such as substance use (Shapiro SL, et al., 2006). Craving, too, may be ameliorated by mindfulness practice as one learns not to react automatically but respond with awareness (Hsu SH, Grow J, Marlatt GA., 2008). Westbrook, et. al., 2013 published evidence-based research indicating that the practice of mindfulness has been shown to reduce the neural aspects of craving (Sayers, et, al, 2015). Another evidence-based research conducted by Corcoran et. al., published in 2010 found that participants exposed to MBSR displayed significantly less anxiety, depression, and somatic distress helping develop effective emotion regulation in the brain (Sayers, et, al, 2015).

Centering Prayer

Centering Prayer, a Christian contemplative practice, is a method designed to facilitate the development of contemplative prayer by preparing our faculties to cooperate, allowing our mind and heart to open to God in order to manage our thoughts and feelings (Keating, 2003). By using four guidelines of Centering Prayer our awareness to God is enhanced: 1. Choose a sacred word as the symbol of intention to consent to God's presence and action within; 2. Sit comfortably with eyes closed and silently introduce the sacred word as the symbol of your consent to God's presence and action within; 3. Return to the sacred word when disturbing thoughts invade; and 4. Remain in silence for a few minutes at the end of the prayer period (Keating, 2003). The use of Centering Prayer helps to manage aversive, craving thoughts by having our focus on the symbolic word representing God's presence, which in turn, replaces negative and disturbing perceptions, feelings, images, memories, reflections, and commentaries. The intentional letting go of negative thoughts which dominate our focus is the focus of Centering Prayer (Jennings, 2014).

According to research conducted in 2014 by Paul Dirkse of St. Catherine University the

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efficaciousness of prayer to be “emotionally regulating” was found as evidence by participant statements: “...if people have Christianity, if they have Christ, if they are a believer, you know, I definitely think that, in and of itself, mitigates their emotional difficulties.” and “having a centering experience where a client is routinely grounding themselves and is taking stock of their thoughts and their feelings... really helpful in managing emotional arousal.”

AA members who recited AA prayers after viewing drinking-related images reported less craving for alcohol after praying than after just reading a newspaper. The reduced cravings in those that prayed corresponded to increased activity in brain regions responsible for attention and emotion as measured by MRI (NYU Langone Medical Center, May, 2016).

Intersection Points of the Techniques

Despite the clinician’s skillful implementation of the Motivational Interviewing techniques the change process can be a frightening and stressful experience for the substance-using individual. A complimentary, soothing approach can be taught to the client and used during the interviewing process.

During the Motivational Interviewing process the clinician’s techniques of expressing empathy; developing discrepancy; rolling with resistance; and supporting self-efficacy can encourage the client to increase awareness of the realistic facts of the substance-using behavior; frequency of use; amount of substance; and subsequent consequences by practicing the Mindfulness technique of “present moment” focus. The clinician’s non-judgmental and empathic qualities of the MI approach can role-model for the client the Mindfulness technique of acceptance of the substance use rather than denial or avoidance (Marcus and Zgierska, 2009). The client can then be encouraged to “let go” of the romantic memories of using and center their thoughts on words or images that are able to strengthen non-using thought processes as indicated

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in the Centering Prayer approach.

Emotional regulation is also learned by the client with the enhancement of awareness in the process of MI (Using Motivational Interviewing, 2008), Mindfulness (Marcus and Zgierska, 2009), and Centering Prayer (Keating, 2003). Identifying negative emotions which trigger the use of substances (MI) and practicing the “stillness” with the specific, negative emotion (Mindfulness and Centering Prayer) can be facilitated by the clinician in the same session. A noticeable change in the client’s emotional state is visible after practicing Mindfulness or Centering Prayer as the client’s ability to accept the negative emotion is experienced and validated.

Managing neurobiological, cognitive and affective cravings help the client in developing a substitute relationship with the self that excludes substances. MI allows for the change process to motivate substance users to develop self-compassion through Mindfulness practice and/or to develop a present relationship with a compassionate God through Centering Prayer practice. Forgiveness from the self and from a Higher Power prompts further change toward self-efficacy in recovery. Practicing forgiveness in addiction recovery can allow the individual to develop emotional sobriety. It will make it easier for the individual to offer themselves forgiveness and let go of guilt (Healing Power of Forgiveness).

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